

AMENDMENTS TO THE CLAIMS

1-15. (CANCEL)

16. (NEW) A mobile communications terminal comprising:
an electronic circuit configured to receive a wireless communications signal carrying signal channels with transmitted information, the electronic circuit comprising signal processing units adapted to provide at least one of:
a signal representing gain from an automatic gain control unit (gain signal);
a transmission power control command signal (TPC command signal);
an interference estimate signal;
a signal representing strength of the wireless communications signal; and
a signal representing a signal-to-interference ratio;
an interference classifier adapted to classify a type of interference affecting communications quality by evaluating time-domain behavior of at least one of the gain signal, the TPC command signal, the interference estimate signal, the signal representing the strength of the wireless communications signal, and the signal representing the signal-to-interference ratio;
and
wherein the type of interference is classified in one of at least two predetermined classes of interference.
17. (NEW) The mobile communications terminal of claim 16, wherein:
a first class of interference includes inter-cell interference; and
a second class of interference includes intra-cell interference.
18. (NEW) The mobile communications terminal of claim 16, further comprising:
means for processing the communication signal in a first of at least two ways; and
wherein the first way is selected dependent upon a classified type interference.
19. (NEW) The mobile communications terminal of claim 16, further comprising filter means for processing the wireless communication signal via a set of filter coefficients selected dependent upon of a classified type of interference.
20. (NEW) The mobile communications terminal of claim 19, wherein:
the filter means comprises a low-pass filter; and
the low-pass filter has a relatively wide band-width when interference is classified to be intra-cell interference and a relatively narrow band-width when interference is classified to be inter-cell interference.

21. (NEW) In a mobile communications terminal adapted for use in a cellular communications system, a method comprising the steps of:
receiving a wireless communications signal carrying signal channels;
extracting the signal channels;
providing at least one of:
a signal representing gain from an automatic gain control unit (gain signal);
a transmission-power-control command signal (TPC command signal);
an interference estimate signal;
a signal representing a strength of the wireless communications signal; and
a signal representing a signal-to-interference ratio;
classifying a type of interference affecting communications quality by evaluating a time-domain behavior of at least one of the gain signal, the TPC command signal, the interference estimate signal, the signal representing the strength of the wireless communications signal, and the signal representing the signal-to-interference ratio; and
wherein the type of interference is classified in one of at least two predetermined classes of interference.
22. (NEW) The method of claim 21, wherein a first class of interference includes inter-cell interference and a second class includes intra-cell interference.
23. (NEW) The method of claim 21, further comprising:
processing the wireless communications signal in a first of at least two ways; and
wherein the first way is selected from the at least two ways dependent upon a classified type of interference.
24. (NEW) The method of claim 21, further comprising:
filtering the wireless communications signal with a low-pass filter; and
wherein the filter has a relatively high band-width when interference is classified to be intra-cell interference and has a relatively low band-width when interference is classified inter-cell interference.
25. (NEW) A mobile communications terminal comprising:
an electronic circuit configured to receive a wireless communications signal carrying signal channels with transmitted information, the electronic circuit comprising signal processing units adapted to provide at least one signal for at least one of adjusting, verifying, and demodulating the wireless communication signal;
an interference classifier adapted to classify a type of interference affecting communications quality by evaluating time-domain behavior of at least one of the at least one signal; and
wherein the type of interference is classified in one of at least two predetermined classes of interference.

26. (NEW) The mobile communications terminal of claim 25, wherein the at least one signal comprises at least one of:

- a signal representing gain from an automatic gain control unit (gain signal);
- a transmission power control command signal (TPC command signal);
- an interference estimate signal;
- a signal representing strength of the wireless communications signal; and
- a signal representing a signal-to-interference ratio.

27. (NEW) In a mobile communications terminal adapted for use in a cellular communications system, a method comprising the steps of:

- receiving a wireless communications signal carrying signal channels;
- extracting the signal channels;
- providing at least one signal for at least one of adjusting, verifying, and demodulating the wireless communication signal;
- classifying a type of interference affecting communications quality by evaluating a time-domain behavior of at least one of the at least one signal; and
- wherein the type of interference is classified in one of at least two predetermined classes of interference.

28. (NEW) The method of claim 27, wherein the at least one signal comprises at least one of:

- a signal representing gain from an automatic gain control unit (gain signal);
- a transmission-power-control command signal (TPC command signal);
- an interference estimate signal;
- a signal representing a strength of the wireless communications signal; and
- a signal representing a signal-to-interference ratio.